What is the DII COE

- **The DII COE can be described as**
  - a reference implementation of the DOD Joint Technical Architecture containing a collection of reusable software components
  - a software infrastructure for supporting mission applications and their reuse across Service domains
  - an approach for facilitating integration and enabling interoperability
  - a set of guidelines, standards, specifications, and products
- **GCCS is a C4I System built on top of the DII COE**

"The DII COE is *not* a system; it is a *foundation* for building a shared system."

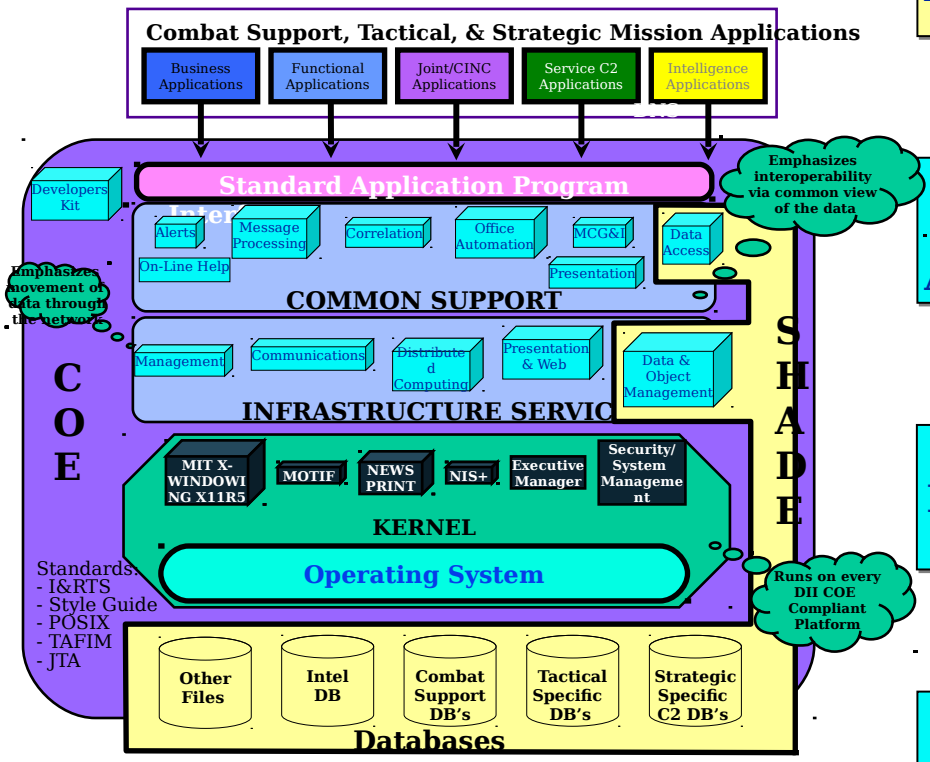
DIJ Role in DII COE

- AF advocate for concerns and issues raised to the DISA DII COE Office
- Gather AF requirements for DII COE
- Provide AF programs guidance on how to use the COE and segment software
- Support DII COE compliance testing
- AF reps to The TWGs and AOGs
- Distribute DII COE software to AF organizations
- Close relationship to the AF DII COE Chief Engineer
- AF DII COE web site for .mil, & .gov
  - https://dii-af.hanscom.af.mil/infrastructure/COE/COEHOME.HTM
- AF DII COE web site for venders and developers
  - http://www.hanscom.af.mil/esc-dii/

Contact Info

- DII COE programmatic issue or if you do not know were to call
  - Vickie Barry - DSN 478-8129 (vickie.barry@hanscom.af.mil)
- DII COE Chief Engineer issue
  - Jay Scarano DSN 478-7240 (jgs@mitre.org)
- NT questions
  - Eric Krum M-5144 (krume@mitre.org)
- UNIX questions
  - Brett Johnson M-5871 (bjohnson@mitre.org)

DII COE



Mission Applications

- Mission Unique Functionality
- Developed by Services/Agencies
- Controlled/Deployed by Services and Agencies

Common Support Applications

- Functionality Common within Domains
- Developed by Services/Agencies
- Controlled & Deployed by DISA

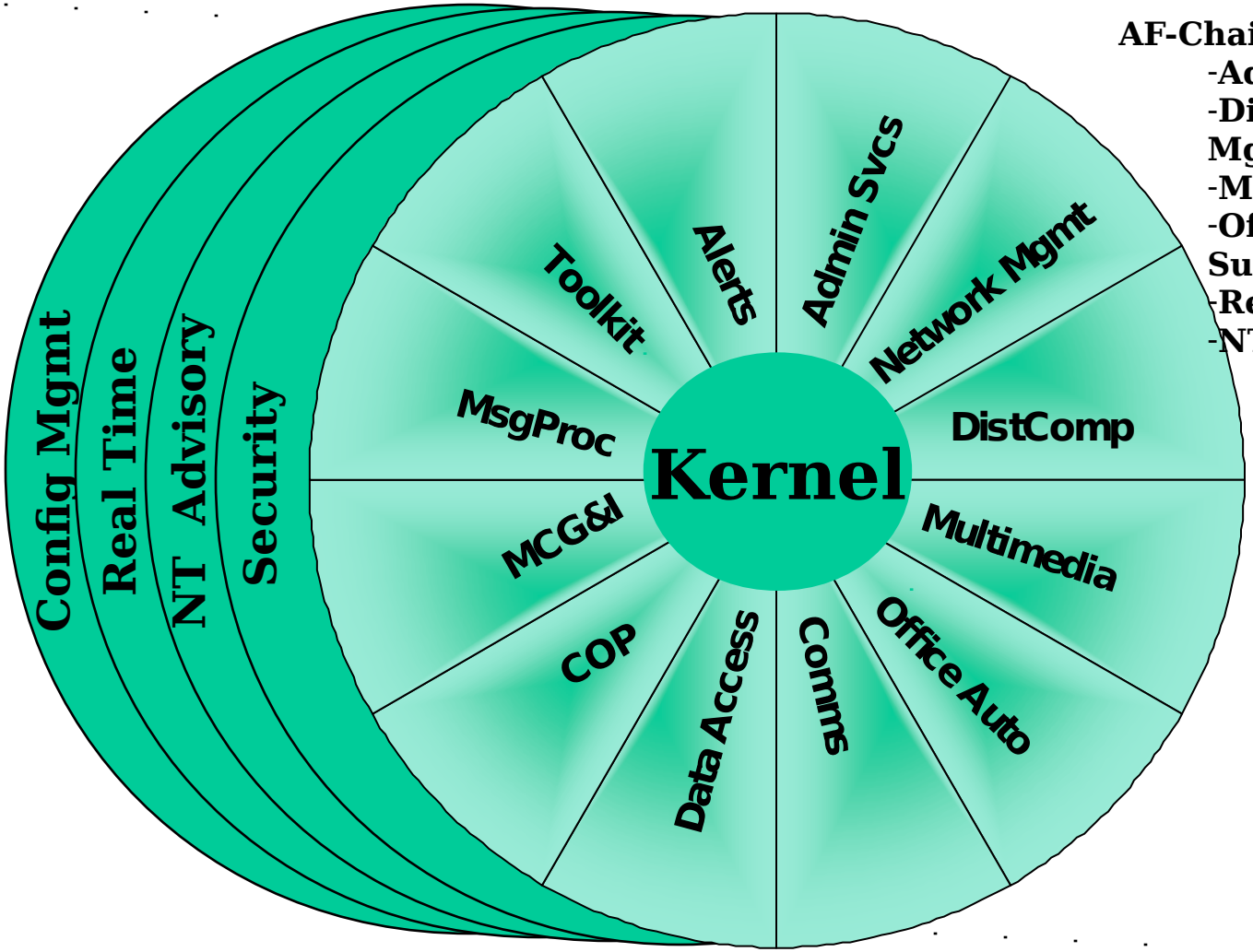
Common Infrastructure Services

- Functionality Common across DoD
- Developed by Services/Agencies & DISA
- Controlled & Deployed by DISA

DII COE Kernel

- Functionality needed for all Applications
- Developed by DISA
- Controlled/Deployed by DISA

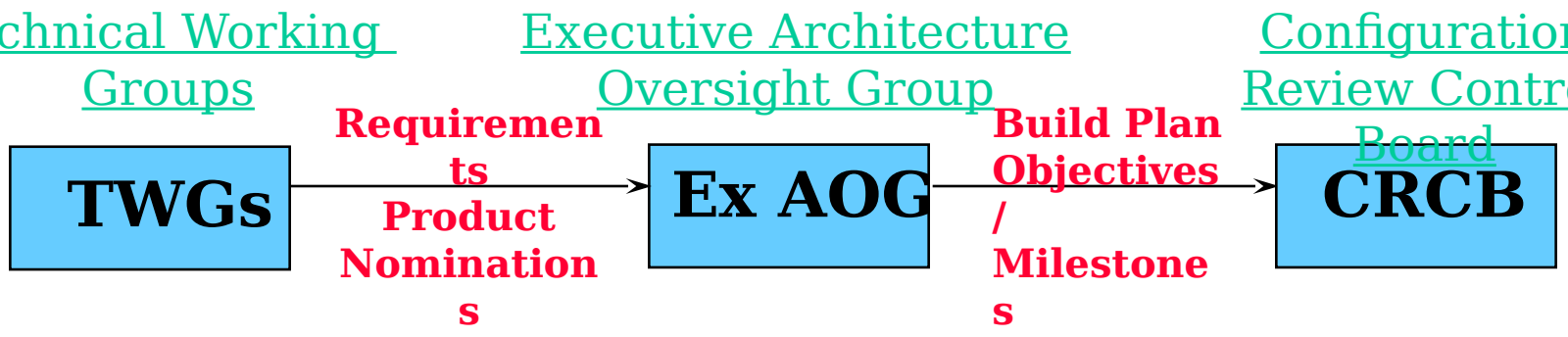
Technical Working Groups



AF-Chaired TWGs

- **-Admin Svcs**
- **-Dist.Computing & Object Mgmt**
- **-Multimedia & Collab Svcs**
- **-Office Auto & On-Line Support**
- **-Real Time**
- **-NT Advisory Group**

DII COE Management Structure



Chair: S/A Lead

Members: S/A Technical Reps

Key AF Activities:
- Advocate for AF Rqmts
- Offer AF contributions
- Design Review

Chair: DII COE Chief Engr Ken Wheeler

Members: S/A O-6

Key AF Activities:
- Review/Approve Build Plan
- DII COE Schedules
- Satisfy AF Priority Rqmts
- Advocate AF Position
- Broker AF contributions
- Correlate AF/DISA build plans

Chair: BGen Salisbury

Members: S/A Flag

Key AF Activities:
- Approve Build Plan
- Overall DII COE objective & milestones
- API retirements
- COE directions
- Hardware & Software baseline

Definition and Design .... Planning and Building ..... Approval and Release

COE Requirement Submission Process

- Review COE
- Identify required missing functionality
- Submit requirement to AF DII COE requirement database for that missing functionality
  - https://dii-af.hanscom.af.mil/infrastructure/COE/SRS/SRS.html
  - Identify if High priority if it is a mandate in COE
  - Identify funding or

IF YOU COMPLETE THIS STEP WE WILL GET A HIGH PRIORITY IF IT IS A MANDATE BUT PROBABLY NO PRODUCT

COE Component Nomination Process

Service/Agency

SPO
- Requirements Submission
  - Product Nomination (ECP/SCP)
  - Commitment/Support Plan
    - Segmentation
    - Licenses ($$)
    - Maintenance

DI
- DIJ Coordination
- Chief Arch/Eng Coordination
  - Tech Evaluation
  - Design Review
- AOG Rep Nominates

Cognizant TWG(s)

- TWG Rep Nominates
- Requirements Review
- Product/Features Demo
- TWG Design Review (PDR)
- Tech Eval. (Arch, JTA, Interoperability, etc)
- Address Integration/Compatibility Issues
- TWG Recommendation

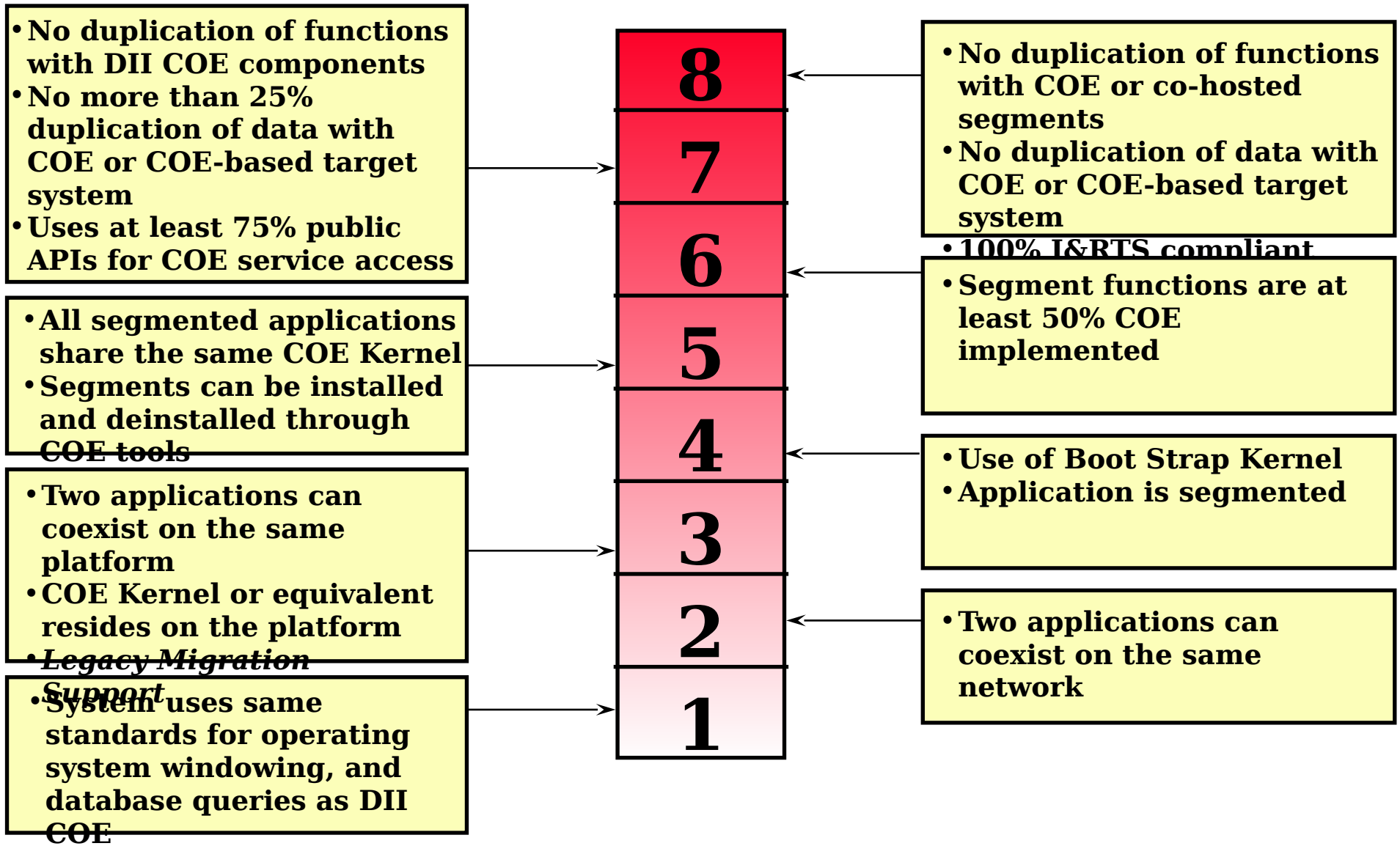
DISA Eng. Office

- Joint S/A Design Review
- Integration Resource Asse
- Segment Delivery
- Integration & Test
- Segment Certification
- CM Distribution

COE Compliance

- **Measures the degree to which your software component can plug-and-play in the COE**
- **There are four areas of compliance**
  - Run Time Environment
  - Style Guide
  - Architectural Compatibility
  - Software Quality

Run Time Environment Levels of Compliance


8
7
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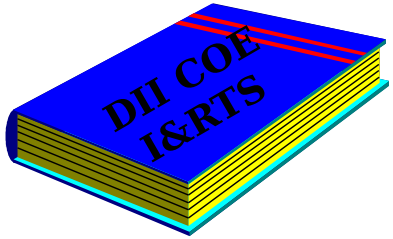
1
• No duplication of functions with DII COE components
• No more than 25% duplication of data with COE or COE-based target system
• Uses at least 75% public APIs for COE service access
• All segmented applications share the same COE Kernel
• Segments can be installed and deinstalled through COE tools
• Two applications can coexist on the same platform
• COE Kernel or equivalent resides on the platform
• Legacy Migration Support
• System uses same standards for operating system windowing, and database queries as DII COE
• No duplication of functions with COE or co-hosted segments
• No duplication of data with COE or COE-based target system
• 100% I&RTS compliant
• Segment functions are at least 50% COE implemented
• Use of Boot Strap Kernel
• Application is segmented
• Two applications can coexist on the same network

DII-COE I & RTs Waiver Process

DII COE Segments



- Determine Level of Compliance Desired
- Perform I&RTS Self Assessment
- Determine Waivers Required to Achieve Desired Compliance Level
- Request Waiver Form from DII AF COE Chief Engineer
- Submit Waiver Request Form to DII AF COE Chief Engineer

- DII AF Review/Evaluation
- Schedule DISA segment design review
- Granted by DII COE Chief Engineer as part of segment design review process

- Waiver is documented in se Version Description Docum Design Review Brief
- Waiver is valid until segme resubmitted or re-engineer

Mission Application Segments

- DII AF Review/Evaluation
- Submit to cognizant System Level Chief Engineer
- Schedule meetings as necessary
- Integration Council Review
- Granted by agreement of cognizant System-Level

DII COE Schedule